

CHAPTER 33

FIRE HOSE

33-1. **GENERAL.** This chapter contains inspection and maintenance information about fire hose and fire hose nozzles used on board Army watercraft.

33-2. **APPLICATION.** Fire hoses and nozzles shall be serviceable and connected to all fire stations. Fire hoses and nozzles will be maintained in accordance with this chapter.

33-3. **VISUAL INSPECTION.** Visual inspections will be made on fire hoses, nozzles, and hose couplings. The following describes the inspection of each of these items.

a. **Fire Hose.** Inspect each fire hose during weekly fire drills to determine that the hoses and nozzles have not been vandalized. Check to make sure that the fire hoses are free of debris. Also check to make sure there is no evidence of mildew or rot, or damage by chemicals, burns, cuts, abrasions, and vermin. If the hose fails the visual inspection, it must be removed from service, destroyed, and replaced.

b. **Nozzles.** All nozzles will be inspected at weekly fire drills and after each use. Inspection will include the following:

- Clear of obstructions in waterway.
- No damage to tip.
- Tip chain is intact.
- Full operation of adjustments, such as pattern selection, and so on.
- Proper operation of shutoff valve.
- No parts missing.

If the nozzle fails the inspection for any reason, it must be removed from service and repaired or replaced. Nozzles attached to in-service fire hoses will be kept in the closed position. If during use there is an obstruction that cannot be removed by flushing the nozzle, disconnect the nozzle from the hose and remove the obstruction through the hose connection end. Attempting to force the obstruction out through the tip may damage the nozzle. Handle nozzles with care. Avoid dents or nicks in nozzle tips, as this may seriously affect the reach of the stream. Nozzle control valves will be opened and closed slowly to reduce pressure surges. This would eliminate unnecessary strain on the hose and couplings. After use, all nozzles will be flushed and inspected before being placed back in service.

c. **Hose Couplings.** Couplings will be kept in serviceable condition. After use, and during each pressure test of the hose, they will be visually inspected for the following:

- Damaged threads.
- Corrosion.
- Slippage on the hose.
- Out-of-round.
- Swivel (not rotating freely).
- Missing lugs.

- Other defects that impair operation.
- Gasket for presence, tight fit, and deterioration.

Couplings found defective will be removed from service and replaced. Do not drop couplings on steel deck or other hard surfaces. Doing this can cause damage to the threads. Do not allow vehicles to drive over couplings.

33-4. HOSE AND COUPLING PRESSURE TEST PROCEDURE. Fire hose and couplings will be tested annually to the maximum pressure they may be subjected in service, but not less than 100 psi. Pressure tests may be performed by vessel's crew. Any length of hose that fails the visual inspection or service test, will be removed from service and destroyed. The following pressure test procedure will be followed:

- Total length of test hose line will not exceed 300 feet. The hose line shall be straight without kinks or twists.

WARNING

Questionable hose or hoses that have been repaired or recoupled will be tested one length at a time.

- Connect the test hose line to a fire station valve. This valve must be manned during the test to prevent discharging a large volume of water in the event of a hose bursting during the test.
- Attach a nozzle to the far end of the hose line.
- With the fire station valve open and the end nozzle open, gradually increase the pressure to approximately 45 psi. Slowly close the end nozzle when the hose line is free of air and full of water. Close the fire station valve.
- Secure the hose line to avoid possible whipping or other uncontrolled reaction in the event of a hose burst.
- Check hose line for leakage at the couplings. Tightened couplings with a spanner wrench where necessary. Mark each hose at the back of each coupling with a felt tip marker to determine if the coupling moves on the hose during the test.

WARNING

Clear all personnel from the area except those required to perform the remainder of the test procedure.

- Slowly increase the pressure to test pressure (not less than 100 psi) and hold for five minutes.
- Inspect for leaks while the hose line is at the test pressure.

WARNING

Personnel shall never stand in front of the free end of the hose, within 15 feet to the side of the hose, or straddle a hose during the pressure test.

- If a section of the hose is leaking or bursts, terminate the test. Drain the hose line and remove and destroy the failed hose.
- After the five minute pressure test, shutdown the pump, open the end nozzle to relieve the pressure, and drain the hose line.
- Observe the marks placed on the hose at the back of the couplings. If the coupling has slipped or twisted, the hose has failed the test. Remove and destroy the failed hose.
- Enter the test results in the ship's log.

All hoses shall be cleaned, drained, and dried before being placed in service or storage.

33-5. **MARKING.** All tire hoses shall be marked with the vessel's name or number, test date, and test pressure.

33-6. **PROCUREMENT.** The following are the NSNs for fire hoses and nozzles.

- . Hose, fire, 1 1/2 inches by 50 feet, orange, NSN 4210-01-131-0249.
- . Hose, fire, 2 1/2 inches by 50 feet, orange, NSN 4210-01-131-0247.
- . Nozzle, 1 1/2 inches, 3 position, NSN 4210-00-392-2943.
- . Nozzle, 1 1/2 inches, 3 position, NSN 4210-00-329-2944.

NOTE

Do not replace old fire hoses and nozzles unless they are damaged or are no longer serviceable.